CLAIMS:

What we claim as our invention are as follows:

- A method uses the "row/column buffer switches" that lets LCD to scan either
 vertically or horizontally. That a rectangle LCD can accept either a landscape or a
 portrait image without a pre-rotate process.
- 2. According to claim 1, a method to solve the unequal column and row number issue.
 - 1) Using the Extra Scan Lines Scheme.
 - 2) Using the Extra Column Buffer Scheme.
- 3. According to claim 1 and 2, a method to solve the TFT LCD electrode direction issue.
 - 1) Using Common Source Circuit.
 - 2) Using Common Drain Circuit.